

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	4	silicase and silicic andpoymer? and polypeptide?	US-PGPUB; USPAT; DERWENT	OR	ON	2006/06/07 13:50
L2	0	silicase and silicic and polymer? and polypeptide?	US-PGPUB; USPAT; DERWENT	OR	ON	2006/06/07 13:51
L3	0	silicase and silicic and polypeptide?	US-PGPUB; USPAT; DERWENT	OR	ON	2006/06/07 13:51
L4	4	silicase and silicic	US-PGPUB; USPAT; DERWENT	OR	ON	2006/06/07 13:53
L5	4	silicase	US-PGPUB; USPAT; DERWENT	OR	ON	2006/06/07 13:53
L6	695	silicon and polypeptide and silicic	US-PGPUB; USPAT; DERWENT	OR	ON	2006/06/07 13:55
L7	10	silicon and polypeptide and silicic and carbonic adj anhydrase	US-PGPUB; USPAT; DERWENT	OR	ON	2006/06/07 13:55

NEWS 6 FEB 22 Updates in EPFULL; IPC 8 enhancements added  
 NEWS 7 FEB 27 New STN AnaVist pricing effective March 1, 2006  
 NEWS 8 MAR 03 Updates in PATDPA; addition of IPC 8 data without attributes  
 NEWS 9 MAR 22 EMBASE is now updated on a daily basis  
 NEWS 10 APR 03 New IPC 8 fields and IPC thesaurus added to PATDPAFULL  
 NEWS 11 APR 03 Bibliographic data updates resume; new IPC 8 fields and IPC thesaurus added in PCTFULL  
 NEWS 12 APR 04 STN AnaVist \$500 visualization usage credit offered  
 NEWS 13 APR 12 LINSPEC, learning database for INSPEC, reloaded and enhanced  
 NEWS 14 APR 12 Improved structure highlighting in FQHIT and QHIT display in MARPAT  
 NEWS 15 APR 12 Derwent World Patents Index to be reloaded and enhanced during second quarter; strategies may be affected  
 NEWS 16 MAY 10 CA/CAPplus enhanced with 1900-1906 U.S. patent records  
 NEWS 17 MAY 11 KOREAPAT updates resume  
 NEWS 18 MAY 19 Derwent World Patents Index to be reloaded and enhanced  
 NEWS 19 MAY 30 IPC 8 Rolled-up Core codes added to CA/CAPplus and USPATFULL/USPAT2  
 NEWS 20 MAY 30 The F-Term thesaurus is now available in CA/CAPplus  
 NEWS 21 JUN 02 The first reclassification of IPC codes now complete in INPADOC

NEWS EXPRESS FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005. V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT <http://download.cas.org/express/v8.0-Discover/>

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FULL ESTIMATED COST	0.21	0.21

FILE 'MEDLINE' ENTERED AT 14:01:42 ON 07 JUN 2006

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L1 3 SILICASE AND SILICIC AND SILICON

=> d ibib abs l1 1-3

L1 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2005:1196426 CAPLUS  
DOCUMENT NUMBER: 143:458701  
TITLE: Enzymatic method for producing bioactive,  
osteoblast-stimulating surfaces  
INVENTOR(S): Schwertner, Heiko; Mueller, Werner E. G.; Schroeder,  
Heinz C.  
PATENT ASSIGNEE(S): Germany  
SOURCE: PCT Int. Appl., 55 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005106004	A1	20051110	WO 2005-EP4738	20050502
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			

DE 102004021229 A1 20051124 DE 2004-102004021229 20040430  
PRIORITY APPLN. INFO.: DE 2004-102004021229A 20040430

AB The invention relates to a method for producing bioactive surfaces by enzymic modification of mols. or mol. aggregates, in particular, collagen, on surfaces of glass, metals, metallic oxides, plastics, biopolymers or other materials with an amorphous silicon dioxide (silica) or silicones in the cell culture, by tissue engineering or in medical implants, whereby a polypeptide is used for enzymic modification, which contains a silicatein  $\alpha$  or silicatein  $\beta$  domain. The inventive method promotes the growth, activity and/or mineralization of cells/cell cultures.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN  
ACCESSION NUMBER: 2005:1196376 CAPLUS  
DOCUMENT NUMBER: 143:458700

TITLE: Enzyme and template-controlled synthesis of silica from non-organic silicon compounds as well as aminosilanes and silazanes

INVENTOR(S): Schwertner, Heiko; Mueller, Werner E. G.; Schroeder, Heinz C.

PATENT ASSIGNEE(S): Germany

SOURCE: PCT Int. Appl., 59 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005106003	A1	20051110	WO 2005-EP4734	20050502
<p>W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW</p> <p>RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG</p>				
DE 102004021230	A1	20051124	DE 2004-102004021230	20040430
PRIORITY APPLN. INFO.:			DE 2004-102004021230A	20040430
<p>AB The present invention relates to a method for synthesis of amorphous silicon dioxide (silica, condensation products of silicic acid) and other polymeric metal (IV) compds. from non-organic silicon compds. or metal (IV) compds. as well as from aminosilanes and silazanes, whereby a template (collagen or another mol., interacting with orthosilicic acid or polymeric silicic acid and salts thereof or other metal (IV) compds.) and a silicase/carbonic anhydrase or a silicatein or similar polypeptide are used for synthesis. Said invention also relates to the tech. use thereof.</p>				
REFERENCE COUNT:		4	THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT	

L1 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:307304 CAPLUS

DOCUMENT NUMBER: 140:334637

TITLE: Dissolution and modification of silicates and silicones by silicase and carbonic anhydrase

INVENTOR(S): Mueller, Werner; Schroeder, Heinz C.; Krasko, Anatoli

PATENT ASSIGNEE(S): Johannes-Gutenberg-Universitaet Mainz, Germany

SOURCE: Ger. Offen., 29 pp.  
CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10246186	A1	20040415	DE 2002-10246186	20021003
DE 10246186	B4	20050707		
CA 2501208	AA	20040422	CA 2003-2501208	20031002
WO 2004033679	A1	20040422	WO 2003-EP10983	20031002
<p>W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,</p>				

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,  
 PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,  
 TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 AU 2003276044 A1 20040504 AU 2003-276044 20031002  
 EP 1546319 A1 20050629 EP 2003-807840 20031002  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
 JP 2006501832 T2 20060119 JP 2004-542423 20031002  
 US 2006029939 A1 20060209 US 2005-530240 20050727  
 PRIORITY APPLN. INFO.: DE 2002-10246186 A 20021003  
 WO 2003-EP10983 W 20031002

AB Silicase is an enzyme, which is able to dissolve amorphous and  
 crystalline silicon dioxide under formation of free silicic  
 acid. The present invention concerns the use of the enzyme and  
 silicase fusion proteins and carbonic anhydrase and carbonic  
 anhydrase-related enzymes for degradation, for modification and for synthesis  
 of silicon dioxide (condensation products of the silicic  
 acid, Silicate), silicones and other silicium(IV)- or metal(IV) compds.  
 and their tech. use.

=> s silicase and enzyme  
 L2 7 SILICASE AND ENZYME

=> s silicase and silica  
 L3 7 SILICASE AND SILICA

=> s l2 and l3  
 L4 7 L2 AND L3

=> d ibib abs l4 1-7

L4 ANSWER 1 OF 7 MEDLINE on STN  
 ACCESSION NUMBER: 2003457425 MEDLINE  
 DOCUMENT NUMBER: PubMed ID: 14518376  
 TITLE: Silicase, an enzyme which degrades  
 biogenous amorphous silica: contribution to the  
 metabolism of silica deposition in the demosponge  
 Suberites domuncula.  
 AUTHOR: Schroder Heinz C; Krasko Anatoli; Le Pennec Gael; Adell  
 Teresa; Wiens Matthias; Hassanein Hamdy; Muller Isabel M;  
 Muller Werner E  
 CORPORATE SOURCE: Institut fur Physiologische Chemie, Abteilung Angewandte  
 Molekularbiologie, Universitat, Duesbergweg 6, 55099 Mainz,  
 Germany.  
 SOURCE: Progress in molecular and subcellular biology, (2003) Vol.  
 33, pp. 249-68. Ref: 51  
 Journal code: 0233223. ISSN: 0079-6484.  
 PUB. COUNTRY: United States  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 General Review; (REVIEW)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 200311  
 ENTRY DATE: Entered STN: 2 Oct 2003  
 Last Updated on STN: 13 Nov 2003  
 Entered Medline: 12 Nov 2003

L4 ANSWER 2 OF 7 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 2003:557491 BIOSIS  
 DOCUMENT NUMBER: PREV200300554349  
 TITLE: Silicase, an enzyme which degrades biogenous amorphous silica: Contribution to the metabolism of silica deposition in the demosponge *Suberites domuncula*.  
 AUTHOR(S): Schroeder, Heinz C. [Reprint Author]; Krasko, Anatoli [Reprint Author]; Le Pennec, Gaeel [Reprint Author]; Adell, Teresa [Reprint Author]; Wiens, Matthias [Reprint Author]; Hassanein, Hamdy [Reprint Author]; Mueller, Isabel M. [Reprint Author]; Mueller, Werner E. G. [Reprint Author]  
 CORPORATE SOURCE: Abteilung Angewandte Molekularbiologie, Institut fuer Physiologische Chemie, Universitaet, Duesbergweg 6, 55099, Mainz, Germany  
 SOURCE: Mueller, Werner E. G. [Editor, Reprint Author]. Prog. Mol. Subcell. Biol., (2003) pp. 249-268. Silicon biomineralization: Biology, biochemistry, molecular biology, biotechnology. print.  
 Publisher: Springer-Verlag New York Inc., 175 Fifth Avenue, New York, NY, 10010-7858, USA; Springer-Verlag GmbH & Co. KG, Heidelberger Platz 3, D-14197, Berlin, Germany. Series: Progress in Molecular and Subcellular Biology.  
 CODEN: PMSBA4. ISSN: 0079-6484. ISBN: 3-540-00537-4 (cloth).  
 DOCUMENT TYPE: Book; (Book Chapter)  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 26 Nov 2003  
 Last Updated on STN: 26 Nov 2003

L4 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2006:44174 CAPLUS  
 DOCUMENT NUMBER: 144:308507  
 TITLE: Siliceous spicules in marine demosponges (example *Suberites domuncula*)  
 AUTHOR(S): Mueller, Werner E. G.; Belikov, Sergey I.; Tremel, Wolfgang; Perry, Carole C.; Gieskes, Winfried W. C.; Boreiko, Alexandra; Schroeder, Heinz C.  
 CORPORATE SOURCE: Institut fuer Physiologische Chemie, Abteilung Angewandte Molekularbiologie, Universitaet, Mainz, D-55099, Germany  
 SOURCE: Micron (2005), Volume Date 2006, 37(2), 107-120  
 CODEN: MCONEN; ISSN: 0968-4328  
 PUBLISHER: Elsevier  
 DOCUMENT TYPE: Journal; General Review  
 LANGUAGE: English

AB A review on the siliceous spicules in marine demosponges based on the model species *Suberites domuncula*. The following topics were discussed: structural features of the sponge Bauplan, including mols. involved in cell-cell interactions, mols. involved in cell-substrate interaction, mols. involved in morphogenesis, transcription factors, genes in *S. domuncula* indicative for Wnt signaling, and mols. present in tight junctions. The authors also discussed silicatein, the anabolic enzyme for silica synthesis, and the catabolic enzyme silicase; the morphol. and development of spicules; distribution of silicatein within primmorphs; extracellular arrangement of silicatein in tissues; and phases of silica deposition during spicule formation.

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1196426 CAPLUS  
 DOCUMENT NUMBER: 143:458701  
 TITLE: Enzymatic method for producing bioactive,

INVENTOR(S): osteoblast-stimulating surfaces  
Schwertner, Heiko; Mueller, Werner E. G.; Schroeder,  
Heinz C.  
PATENT ASSIGNEE(S): Germany  
SOURCE: PCT Int. Appl., 55 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005106004	A1	20051110	WO 2005-EP4738	20050502
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 102004021229	A1	20051124	DE 2004-102004021229	20040430

PRIORITY APPLN. INFO.: DE 2004-102004021229A 20040430

AB The invention relates to a method for producing bioactive surfaces by enzymic modification of mols. or mol. aggregates, in particular, collagen, on surfaces of glass, metals, metallic oxides, plastics, biopolymers or other materials with an amorphous silicon dioxide (silica) or silicones in the cell culture, by tissue engineering or in medical implants, whereby a polypeptide is used for enzymic modification, which contains a silicatein  $\alpha$  or silicatein  $\beta$  domain. The inventive method promotes the growth, activity and/or mineralization of cells/cell cultures.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1196376 CAPLUS

DOCUMENT NUMBER: 143:458700

TITLE: Enzyme and template-controlled synthesis of silica from non-organic silicon compounds as well as aminosilanes and silazanes

INVENTOR(S): Schwertner, Heiko; Mueller, Werner E. G.; Schroeder, Heinz C.

PATENT ASSIGNEE(S): Germany

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005106003	A1	20051110	WO 2005-EP4734	20050502
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL,				

SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA,  
 ZM, ZW  
 RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,  
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,  
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,  
 RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,  
 MR, NE, SN, TD, TG

DE 102004021230 A1 20051124 DE 2004-102004021230 20040430  
 PRIORITY APPLN. INFO.: DE 2004-102004021230A 20040430

AB The present invention relates to a method for synthesis of amorphous  
 silicon dioxide (silica, condensation products of silicic acid)  
 and other polymeric metal (IV) compds. from non-organic silicon compds. or  
 metal (IV) compds. as well as from aminosilanes and silazanes, whereby a  
 template (collagen or another mol., interacting with orthosilicic acid or  
 polymeric silicic acid and salts thereof or other metal (IV) compds.) and  
 a silicase/carbonic anhydrase or a silicatein or similar  
 polypeptide are used for synthesis. Said invention also relates to the  
 tech. use thereof.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:307304 CAPLUS

DOCUMENT NUMBER: 140:334637

TITLE: Dissolution and modification of silicates and  
 silicones by silicase and carbonic anhydrase

INVENTOR(S): Mueller, Werner; Schroeder, Heinz C.; Krasko, Anatoli

PATENT ASSIGNEE(S): Johannes-Gutenberg-Universitaet Mainz, Germany

SOURCE: Ger. Offen., 29 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 10246186	A1	20040415	DE 2002-10246186	20021003
DE 10246186	B4	20050707		
CA 2501208	AA	20040422	CA 2003-2501208	20031002
WO 2004033679	A1	20040422	WO 2003-EP10983	20031002
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2003276044	A1	20040504	AU 2003-276044	20031002
EP 1546319	A1	20050629	EP 2003-807840	20031002
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006501832	T2	20060119	JP 2004-542423	20031002
US 2006029939	A1	20060209	US 2005-530240	20050727
PRIORITY APPLN. INFO.:			DE 2002-10246186	A 20021003
			WO 2003-EP10983	W 20031002

AB Silicase is an enzyme, which is able to dissolve  
 amorphous and crystalline silicon dioxide under formation of free silicic acid.  
 The present invention concerns the use of the enzyme and  
 silicase fusion proteins and carbonic anhydrase and carbonic  
 anhydrase-related enzymes for degradation, for modification and for



synthesis of silicon dioxide (condensation products of the silicic acid, Silicate), silicones and other silicium(IV)- or metal(IV) compds. and their tech. use.

L4 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:814665 CAPLUS

DOCUMENT NUMBER: 140:402101

TITLE: **Silicase**, an enzyme which degrades biogenous amorphous silica: contribution to the metabolism of silica deposition in the demosponge *Suberites domuncula*

AUTHOR(S): Schroeder, Heinz C.; Krasko, Anatoli; Le Pennec, Gael; Adell, Teresa; Wiens, Matthias; Hassanein, Hamdy; Mueller, Isabel M.; Mueller, Werner E. G.

CORPORATE SOURCE: Institut fuer Physiologische Chemie, Abteilung Angewandte Molekularbiologie, Universitaet, Mainz, 55099, Germany

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AB A review on the ability of **silicase** to depolymerize the siliceous spicules, the major skeleton of Demospongiae and Hexactinellida. **Silicase** comprises very likely two functions: it has the ability to dissolve calcareous material, in analogy to carbonic anhydrase, and to dissolve amorphous silica finally to silicic acid. Hence, the **silicase** found first in *Suberites domuncula* might be basically able to function both in the catabolism of their own siliceous spicules and, if present, also of endogenous calcareous material.

REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT